Avifauna of the *Brachylaena* woodlands in the Usambara lowlands

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Although the avifauna of the East Usambara submontane and lowland forests is well-known[1,6,8,9,11], relatively few forest patches in this range have received significant ornithological attention. Furthermore, the botanically important *Brachylaena* woodlands in and north of the Bombo Valley have not been investigated ornithologically. Given that two Endemic Bird Areas, the Tanganyika–Nyasa mountain range and Kenya–Tanzania Coastal Forests, converge in the East Usambaras[7,10], the priorities for conserving the known and potential biodiversity of this area are a high priority. Consequently, the authors together with Rhamadan Nzira, Ajibu Peter, Ernesti Tarimo set out to evaluate the ornithological importance of these little-known or unexplored forest patches. We investigated four lowland sites in August–October 1996: Mgambo Proposed Forest Reserve (hereafter PFR), Bombo East I & II PFR and Bombo West Forest Reserve (hereafter FR). Our prime objectives were to document the avifauna and search for globally threatened birds.

Bombo East II and Mount Nilo (N. Cordeiro)

Mgambo PFR

This site, just north of Mtai Forest Reserve, Maramba (see map in Evans *et al*[4]) consists of riverine forest, *Acacia* woodland and a small patch of *Brachystegia* woodland on the easternmost hill. We were cordially received there by the village chairperson, the local foresters and many of the villagers. Due to the scarcity of water in the area, we had to camp close to a small spring (the major water source for the nearby villages of Mgambo and Kibaoni). The avifauna of this proposed forest reserve was not particularly rich, although we did find the three near-threatened species known from the Usambaras[2]. **Southern Banded Snake Eagle** *Circaetus fasciolatus* was occasionally sighted or heard, as were at least 2–3 pairs of **Fischer's Turaco** *Tauraco fischeri*, which together with **Black-and-white Colobus** *Colobus polycomos* and **Trumpeter Hornbill** *Ceratogymna bucinator*, added flashes of splendour in riparian habitats. **Plain-backed Sunbird** *Anthreptes reichenowi* was abundant, feeding alone, in pairs or with mixed-species flocks. Although riverine forest appeared to be the main haunt for these and several other lowland forest birds, including the endemic race of **Red-headed Bluebill** *Spermophaga ruficapilla*, the *Brachystegia* forest on the easternmost hill proved interesting too. At least four lengthy excursions in and around this densely vegetated hill brought records of **Thick-billed Cuckoo** *Pachycoccyx audeberti* (first record for the Usambaras), **Striped Pipit** *Anthus lineiventris* (at 550 m, the lowest recorded altitude), **East Coast Batis** *Batis soror* and **'Mombasa' Woodpecker** *Campethera abingoni mombassica*. Other interesting records included: a tame pair of **Pallid Honeyguide** *Indicator meliphilus*, **African Pygmy Kingfisher** *Ceyx picta* and a small population of **Grey-olive Greenbul** *Phyllastrephus cerviniventris*, a poorly

Male Plain-backed Sunbird *Anthreptes reichenowi*, Bombo East I PFR, Tanzania (N. Cordeiro) known pyconontid. **Blue-spotted Wood Dove** *Turtur afer*, apparently once common but now reportedly scarce in the East Usambaras[13], was observed near Bwiti, just inside the eastern boundary of the reserve and along the road bordered by dense stands of mango trees.At night, playback and vocal imitations of the enigmatic **Sokoke Scops Owl** *Otus ireneae* yielded **African Wood Owl** *Strix woodfordii* and the numerous **Barred Owlet** *Glaucidium capense* but no evidence of the scops owl's presence.

View of Bombo West PFR and rice paddies from Bombo East I PFR (N. Cordeiro)

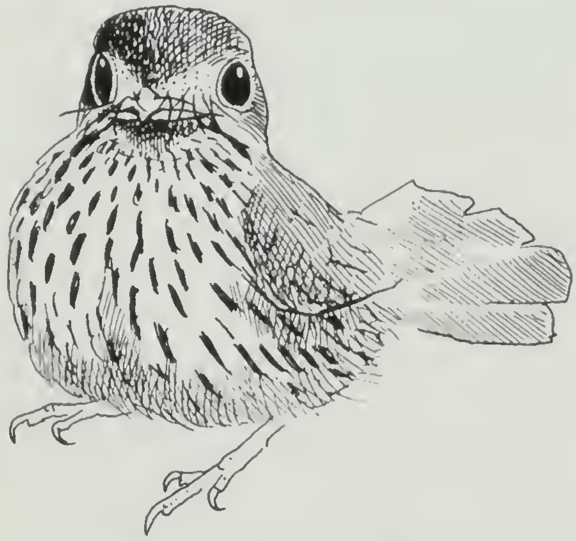
Bombo East I PFR

Situated within a short walk of Makorokoro village along the road leading to the Kilangangua Forest Station. Again, we were warmly welcomed by the village chairman and village members, and were able to establish a camp just inside the thickly wooded reserve. The area definitely left its mark in terms of snakes and especially mosquitoes; two members of the team were struck with malaria c2 weeks later. This lowland site proved the most interesting of the four visisted, as the mosaic of *Brachylaena* woodland and Coastal Forest enveloping two hills revealed a particularly rich avifauna. We recorded one individual of the threatened **Amani Sunbird** *Anthreptes pallidigaster* and several of the near-threatened birds already mentioned. A pair of **Southern Banded Snake Eagle** nesting near our camp was exciting and whilst observing the nest a **Banded Snake Eagle** *Circaetus cinerascens* was seen on one occasion, gliding over. This is unusual as the two are generally considered allopatric[1] and finding this eagle close to the coast is equally intriguing. Other species included **Black-fronted Bush-shrike** *Malaconotus multicolor*, **White-starred Robin** *Pogonocichla stellata* and **White-chested Alethe** *Alethe fuelleborni*, all of which were either cool season visitors to the lowlands from more montane areas or possibly resident. Nevertheless, two globally threatened East Usambara lowland forest species (**Swynnerton's Robin** *Swynnertonia swynnertoni* and **East Coast Akalat** *Sheppardia gunningi*)[2–4], went unrecorded at this potentially favourable site despite considerable effort to search for them. Their apparent absence here may be real given that the habitat (and elevation in the case of the akalat) differs from that known elsewhere (see Evans[5]), but the possibility that they were overlooked in poorly explored parts of the site cannot be ruled out.

White-starred Robin *Pogonocichla stellata* by Martin Woodcock

Our early morning and late evening birdwalks provided glimpses of the very secretive **African Broadbill** *Smithornis capensis*, crepuscular **Bat Hawk** *Macheiramphus alcinus* and small parties of nervous **Crested Guineafowl** *Guttera pucherani*. Noisy flocks of **Retz's** *Prionops retzii* and **Chestnut-fronted Helmet Shrikes** *P. scopifrons* and **Black-breasted Starling** *Lamprotornis corruscus* were often seen in the canopy, occasionally joining mixed-species flocks. These flocks consisted of **Tiny Greenbul** *Phyllastrephus debilis*, **Black-headed Apalis** *Apalis melanocephala*, **Eastern Nicator** *Nicator gularis*, **Forest Batis** *Batis mixta*, **Blue-mantled Crested** *Trochocercus cyanomelas*, **African Paradise** *Terpsiphone viridis* and **Little Yellow Flycatchers** *Erythrocercus holochlorus*, **Dark-backed Weaver** *Ploceus bicolor*, **Narina Trogon** *Apaloderma narina*, **Plain-backed** and **Collared Sunbirds** *Anthreptes collaris* and, depending on the habitat, other species of greenbul, **Fischer's Greenbul** *Phyllastrephus fischeri* and **Terrestrial** *P. terrestris* and **Northern Brownbuls** *P. strepitans* were occasionally encountered in the thickets but the most obvious understorey species was **Red-tailed Ant Thrush** *Neocossyphus rufus*, which often alarm-called loudly when disturbed at safari ant swarms.

In areas bordering the forest, such as the river and rice paddies below the hills, or in surrounding drier *Acacia* woodland, several additional species were observed. A pair of **Black-and-white Flycatcher** *Bias musicus* performed extraordinary displays and sang from tall fig trees along the river. Also in woodland near the river, **Hunter's Sunbird** *Nectarinia hunteri* and a pair of **Pygmy Batis** *Batis perkeo*, both dry country species, were encountered. The burnt southern section of the reserve also produced several dry habitat species, including **Red-headed Weaver** *Anaplectes rubriceps*, **White-crested Helmet-shrike** *Prionops plumatus* and **Bearded Woodpecker** *Dendropicos namaquus*. On one wet morning, we luckily saw a pair of dancing **Cabanis Bunting** *Emberiza cabanisi* flirting their bright yellow, black and white colours atop the summit.



African Broadbill *Smithornis capensis* by Martin Woodcock

Bombo East II PFR and Bombo West FR

By late September, with small showers announcing the arrival of the short rainy season, we made our final reconnaissance of Bombo West FR. The hill adjacent to this large reserve, comprises Bombo East II PFR, a small patch of mixed forest not unlike Bombo East I. The avifauna, although surveyed briefly, also appeared similar. Bombo West, however, consisted of extensive and dense *Brachylaena* woodland with scattered patches of *Acacia* woodland in parts of the reserve. We camped close to the Makorokoro to Kwetonge road, which was advantageous, as we were frequently able to stop bicyclists carrying fresh fish and vegetables from Kwetonge to sell in the Bombo Valley villages. The avifauna of this reserve was rather impoverished with only a few Coastal Forest species eg **Fischer's Greenbul**, **Terrestrial Brownbul**, **Four-coloured Bush-shrike** *Malaconotus quadricolor*, **Little Yellow Flycatcher**, **Plain-backed Sunbird**, **'Mombasa' Woodpecker** and **Chestnut-fronted Helmet-shrike** all principally found in *Brachylaena* stands. Although **Southern Banded Snake Eagle** flew overhead sporadically, there was little evidence that it foraged here. Other *Brachylaena* inhabitants included a possible breeding pair of **Martial Eagle** *Polemaetus bellicosus*, **Grey-headed Bush-shrike** *Malaconotus blanchoti* and **Sooty Falcon** *Falco concolor*. Nocturnal searches for **Sokoke Scops Owl** again proved futile and only **Barred Owlet**, **African Wood Owl** and the **Fiery-necked Nightjar** *Caprimulgus pectoralis* were seen or heard.

The *Acacia* woodland was much more species-rich and provided us with views of **African Penduline Tit** *Anthoscopus caroli*, a juvenile **Steppe Eagle** *Aquila (rapax) nipalensis*, **Grey Tit-Flycatcher** *Myioparus plumbeus*, **Yellow-spotted Petronia** *Petronia pyrgita*, **Sulphur-breasted Bush-shrike** *Malaconotus sulfureopectus* and **Black collared** *Lybius torquatus*, **Brown-breasted** *L. melanopterus* and **d'Arnaud's Barbets** *Trachyphonus darnaudii*. **Crested Francolin** *Francolinus sephaena* called in both habitats but **Crested Guineafowl** appeared to be restricted to the *Brachylaena*-dominated woodland. **Mottled Swift** *Apus aequatorialis*, also observed at the other sites, routinely soared overhead and was sometimes joined by several Palearctic migrant swifts and swallows, and **European Bee-eater** *Merops apiaster*. Only one pair of **Pygmy Batis** was observed here, at the ecotone between the *Acacia* and *Brachylaena* woodland in the centre of the reserve.

Conclusions

The sites described here may qualify for Important Bird Area (IBA) status, either as part of or in addition to the East Usambara IBA, but this will depend upon recommendations made by the Wildlife Conservation Society of Tanzania who are responsible for the IBA programme in Tanzania. Possible IBA status notwithstanding, these data enable comparisons to be made with other lowland forest sites in the area. All four sites share bird species with other East Usambara lowland forests, but the overall diversity was relatively low. Only Bombo East I PFR, comprising a unique forest–woodland mosaic, supported a somewhat richer avifauna with several species of conservation concern. The mix of woodland and Coastal Forest specialists, along with the possibility that the area serves as a cool season refuge for montane species, sets this reserve

Four-coloured Bush-shrike *Malaconotus quadricolor* by Mark Andrews apart from other lowland forest patches in the Usambaras.

With regard to the conservation of these sites, the participation of local communities to conserve their forest patches for catchment purposes, has worked wonders. These proposed reserves were jointly established and demarcated through the cooperation of the local communities and the East Usambara Catchment Forest Project (hereafter EUCFP) office; the latter has made remarkable progress in conserving the area's forests. Nevertheless, severe exploitation of buffer zones which still hold some forest will eventually lead to pressure on these reserves. Additionally, the collection of firewood in Bombo West was rampant and requires control. There is urgent need to restrict the exploitation of buffer zones to those uses which combine ecological sensitivity and economic benefits for local people.

It was noted, in the course of our survey, that *Brachylaena* trees are in high demand for charcoal production in Tanga Region and numerous charcoal-related fires in unprotected woodlands north of the study sites were observed. Given that *Brachylaena* has a unique distribution in East Africa and that several important bird species inhabit this woodland, it is vital to conserve larger such tracts north of the Bombo Valley. The EUCFP has already conserved two extensive patches (Bombo East and West FRs) and the future of the other *Brachylaena* woodland patches could be modeled along the lines of EUCFP's initiatives.

Finally, our survey work failed to locate some of the threatened species known from the Usambara lowlands[2–6], particularly Sokoke Scops Owl. Although most parts of the four reserves were intensively surveyed, it is possible that more can be learned of their avifaunas. Given the scops owl's preference for *Brachylaena* woodland in the Sokoke–Arabuko Forest, Kenya[12], the possibility remains that populations of this and other threatened birds (eg Sokoke Pipit *Anthus sokokensis*) may inhabit these reserves and larger patches of *Brachylaena* woodland to the north.

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